Package ‘ROpenCVLite’

Type Package
Title Helper Package for Installing OpenCV with R
Version 4.52.0
Date 2021-07-05
Maintainer Simon Garnier <garnier@njit.edu>
Description Installs 'OpenCV' for use by other packages. 'OpenCV' <https://opencv.org/> is library of programming functions mainly aimed at real-time computer vision. This 'Lite' version contains the stable base version of 'OpenCV' and does not contain any of its externally contributed modules.
License GPL-3
Imports utils, pkgbuild, parallel
SystemRequirements cmake, C++11
RoxygenNote 7.1.1
Biarch true
Encoding UTF-8
Suggests knitr, rmarkdown
VignetteBuilder knitr
BugReports https://github.com/swarm-lab/ROpenCVLite/issues
NeedsCompilation no
Author Simon Garnier [aut, cre] (<https://orcid.org/0000-0002-3886-3974>), Muschelli John [ctb]
Repository CRAN
Date/Publication 2021-07-05 14:00:05 UTC
R topics documented:

ROpenCV: A package to install OpenCV within R

Description

This is a utility package that installs OpenCV within R for use by other packages. This Lite version does not contain any of the contributed modules of OpenCV.

Author(s)

Simon Garnier, <garnier@njit.edu>

See Also

Useful links:

* [https://swarm-lab.github.io/ROpenCVLite/](https://swarm-lab.github.io/ROpenCVLite/)
* [https://github.com/swarm-lab/ROpenCVLite](https://github.com/swarm-lab/ROpenCVLite)
* Report bugs at [https://github.com/swarm-lab/ROpenCVLite/issues](https://github.com/swarm-lab/ROpenCVLite/issues)

installOpenCV

Install OpenCV

Description

This function will attempt to download, compile and install OpenCV on the system. This process will take several minutes.

Usage

installOpenCV(batch = FALSE)

Arguments

batch A boolean indicating whether to skip (TRUE) or not (FALSE, the default) the interactive installation dialog. This is useful when OpenCV needs to be installed in a non-interactive environment (e.g., during a batch installation on a server).
**isCmakeInstalled**

**Value**

A boolean indicating whether OpenCV was or not installed on the system.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

````
## Not run:
installOpenCV()

## End(Not run)
```

---

**isCmakeInstalled**  
*Check Cmake Installation*

**Description**

This functions checks that Cmake is installed on the system.

**Usage**

````
isCmakeInstalled()
```

**Value**

A boolean indicating whether Cmake was or not installed on the system.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

````
isCmakeInstalled()
```
isOpenCVInstalled  

**Description**

This function checks that OpenCV is installed within the R library.

**Usage**

```r
isOpenCVInstalled()
```

**Value**

A boolean indicating whether OpenCV was or not installed on the system.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

```r
isOpenCVInstalled()
```

---

opencvConfig  

**C/C++ configuration options**

**Description**

Determines the configuration options for compiling C/C++-based packages against OpenCV installed by `ROpenCVLite`.

**Usage**

```r
opencvConfig(output = "libs", arch = NULL)
```

**Arguments**

- `output`: Either 'libs' for library configuration options or 'cflags' for C/C++ configuration flags.
- `arch`: Architecture relevant for Windows. If NULL, then `R.version$arch` will be used.

**Value**

A concatenated character string (with `cat`) of the configuration options.
**opencvVersion**

**Author(s)**
Simon Garnier. <garnier@njit.edu>

**Examples**

```r
if (isOpenCVInstalled()) {
    opencvConfig()
    opencvConfig(output = "cflags")
    opencvConfig(arch = R.version$arch)
}
```

---

**Description**

Determines the version of OpenCV installed within R.

**Usage**

```r
opencvVersion()
```

**Value**

A character string with the version of OpenCV installed by `{ROpenCVLite}`.

**Author(s)**
Simon Garnier. <garnier@njit.edu>

**Examples**

```r
if (isOpenCVInstalled()) {
    opencvVersion()
}
```
Index

cat, 4

installOpenCV, 2
isCmakeInstalled, 3
isOpenCVInstalled, 4

opencvConfig, 4
opencvVersion, 5

ROpenCVLite, 4, 5
ROpenCVLite (ROpenCVLite-package), 2
ROpenCVLite-package, 2